State of Ohio Environmental Protection Agency, Box 1049, 459 East Town Street, Columbus, Ohio 43216 (614) 469-3543

## REPORT OF INVESTIGATION

MARBLE CLIFF QUARRY LANDFILL

Re: Columbus Solid Wasted

CREERA

June 18, 1973

John J. Gilligan Governor Dr. Ira L. Whitman Director The Marble Cliff Quarry, located on the west side of McKinley Avenue, is the site of a proposed municipal landfill for the City of Columbus, Ohio. The site was visited by Messrs. John Noyes and Bruce Hulman of the Ohio Environmental Protection Agency, Division of Surveillance on May 21, 1973.

The bedrock exposed in the quarry is the Columbus limestone of Devonian age. Like so many limestone formations, the Columbus limestone is jointed and fractured allowing easy movement of groundwater. The bedrock walls of the quarry are about 100 feet from the base of the quarry to the original land surface datum. In some areas of the quarry, springs and seeps are quite noticeable on the quarry walls. It was assumed that the ponded water at the base of the quarry approximates the surface of the water table. This assumption was substantiated by measurement of the water level in several wells in close proximity to the quarry. The data from the water level measurements plus available information on water levels in wells elsewhere suggest that the water table gradient is toward the Scioto River. However, this gradient can be altered when a pump in a well is started and then a water supply would become contaminated.

In view of the possible scarcity of cover material required for a landfill, plus the ground-water contamination potential, Marble Cliff Quarry should not be used for disposal of refuse.

Bruce Hulman

Geologist

Division of Surveillance

BH/bjk

CC: Dave Sharp, WM&E
Bob Bauman
Russ Stein

